

ABSTRACT OF THE DISCLOSURE

The present invention reduces the effective dielectric constant of the interlayer insulating film while inhibiting 5 the decrease of the reliability of the semiconductor device, which otherwise is caused by a moisture absorption. A copper interconnect comprising a Cu film 209 is formed in multilayer films comprising a L-OxTM film 203 and a SiO₂ film 204. Since the L-OxTM film 203 comprises ladder-shaped 10 siloxane hydride structure, the film thickness and the film characteristics are stable, and thus changes in the film quality is scarcely occurred during the manufacturing process.